

524,090

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number  
**WO 2004/014432 A1**

- (51) International Patent Classification<sup>7</sup>: **A61K 47/22**, 31/355, 31/565, 31/568, A61P 5/24, 15/00
- (21) International Application Number: PCT/AU2003/000998
- (22) International Filing Date: 7 August 2003 (07.08.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
2002950713 9 August 2002 (09.08.2002) AU
- (71) Applicant (for all designated States except US): **VITAL HEALTH SCIENCES PTY LTD** [AU/AU]; Level 2, 90 William Street, Melbourne, VIC 3000 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WEST, Simon, Michael** [AU/AU]; 3 Verdon Street, Williamstown, VIC 3016 (AU). **KANNAR, David** [AU/AU]; 182 Belgrave-Hallam Road, Belgrave South, VIC 3160 (AU).
- (74) Agent: **ALLENS ARTHUR ROBINSON PATENT & TRADE MARKS ATTORNEYS**; Stock Exchange Centre, 530 Collins Street, Melbourne, Victoria 3000 (AU).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CARRIER

(57) Abstract: There is provided a method for improving the efficacy and/or transdermal transport of topically administered pharmaceuticals and pharmacologically active compounds, said method comprising the step of incorporating the pharmaceutical or pharmacologically active compound in a carrier comprising an effective amount of one or more complexes of a phosphate derivative of a lipophilic pharmaceutically acceptable compound.

WO 2004/014432 A1